

## PENNSYLVANIA.

## SUMMARY.

**Temperature.**—The average temperature of the state, 48.7, is 2.2 above that of April, 1888. Determined from the mean of the daily maximum and minimum temperatures, it was 49.7. The warmest period of the month was during the 19th and 20th, when the following temperatures were noted: Carlisle, 88; Hollidaysburgh, Emporium, Grampian Hills, Uniontown, and New Castle, 84. The lowest temperatures were Charlesville and Somerset, 14, and Uniontown, 17, 7th. Stations reporting the highest monthly means for the state during April were Selin's Grove, 52.8; Swarthmore and Bethlehem, 52.4; Carlisle, 52.3. The lowest were Eagle's Mere, 42.3; Greenville, 44.1; Wellsborough, 44.2; Erie, 45.0; Somerset and Honesdale, 45.2.

**Precipitation.**—The precipitation averaged 4.50, with a decided irregularity in its distribution. The greatest totals were Wellsborough, 8.15; Girardville, 7.28, and Coatsville, 7.08. Most of the precipitation for the month occurred from the 24th to 29th, inclusive. Only a few stations report snow in measurable quantities; the following are notable exceptions: Charlesville, 5.20; Rimersburgh, 9; Grampian Hills, 5; McConnellsburgh, 12; Somerset, 12.50, and Columbus, 6, on the 6th.

**Wind.**—Prevailing direction, west.—Under direction of the Franklin Institute, Philadelphia; T. F. Townsend, Sergeant, Signal Corps, assistant, in charge.

## SOUTH CAROLINA.

## SUMMARY.

**Temperature.**—The monthly mean, 62.4, is 0.7 below the normal of the last three years; highest monthly mean, 67.7, at Batesburgh; lowest monthly mean, 58.5, at Clinton; maximum, 93, at Yorkville, 13th; minimum, 30, at Cedar Springs, 8th. In most instances the highest temperature throughout the state occurred on the 13th, and the lowest on the 7th. Monthly range, 63.

**Precipitation.**—The average for the state, 2.01, is 0.20 above the average of the past three years; greatest monthly, 4.10, at Aiken; least monthly, 0.87, at Batesburgh; greatest daily, 1.35, at Evergreen, 14th. Average number of rainy days, 5.5.

**Wind.**—Prevailing directions, northeast and northwest.—Hon. A. P. Butler, Columbia, director; H. C. Seymour, Private, Signal Corps, assistant.

## TENNESSEE.

The principal meteorological features for April were the prevalence of high winds, the small amount of rainfall, and the small percentage of cloudiness. The month was generally very favorable for the advancement of the farm work of the season.

## SUMMARY.

**Temperature.**—The mean temperature, 59.9, was very slightly in excess of the average of the past seven years. The highest monthly mean, 66.7, was recorded at Woodstock, and the lowest, 56.1, at Greenville; maximum, 90, at Cog Hill, 12th; minimum, 28, at Springdale, 7th, and on the 8th at Lawrenceburg and Hohenwald. This was the highest April minimum recorded during the past seven years except that of last year, 30. The highest temperatures were generally recorded on the 11th, and the lowest on the 6th and 7th. The daily ranges of temperature were slightly in excess of the normal.

**Precipitation.**—The average rainfall for the month, 2.46, is 1.32 less than the April average for the past seven years, and the least during that period. Of this amount the eastern division received an average of about 2.50; the middle division a little more than that, while the western division received only about 2.00. Nearly three-fourths of this amount fell on four days, 12th to 15th, inclusive. These rains, also those of the 1st, 20th, 24th, and 30th, were general rains, the others were very light and local in character. The rain of the 14th was the heaviest during the month. The greatest monthly rainfall was 4.90, at Riddleton, and the smallest, 1.11, at Milan. The greatest local daily rainfall was 2.35, at Florence Station, 14th, which station also showed the greatest daily fall in March.

**Wind.**—Prevailing direction, west.—J. D. Plunket, M. D., Nashville, director; H. C. Bate, Signal Corps, assistant.

## TEXAS.

## SUMMARY.

**Temperature.**—The mean over the state was uniformly about 3 above the normal for April, except immediately along the Gulf coast, where the normal prevailed, and in that portion north of the 32d parallel and east of the 97th meridian, where the mean was from 4 to 6 in excess of the normal. The highest reported was 94, at Pecos City, 15th, and the lowest, 35, at Fort Elliott, 4th and 10th. The mean for the month for the eastern and southern portions of the state was 69; for the central and western portions, 64, and for the northern or Panhandle portion, 59.

**Precipitation.**—There has been a marked deficiency in the amount of rainfall for the month over the central and southern portions of the state, where only about 50 per cent. of the normal precipitation for April has fallen. The normal amount fell over the extreme western and northeastern portions of the state, while in the eastern portion of the Panhandle the rainfall was from 2.00 to 4.00 in excess of the normal. No general rains fell during the month, and that which fell was very unevenly distributed.—S. O. Young, M. D., Galveston, director; I. M. Cline, Sergeant, Signal Corps, assistant.

## Meteorological record of Army post surgeons and voluntary observers, April, 1889.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.			Max.	Min.	Mean.	
Alabama.	°	°	°	Ins.	California—Cont'd.	°	°	°	Ins.
Ashland †*	80	43	60.0	2.43	Berkeley	94	50	66.6	0.71
Auburn	82	38	62.5	3.73	Berkeley	75	44	56.7	0.73
Bermuda †	85	38	61.3	1.21	Bishop Creek*	93	44	68.2	0.12
Butler † d	85	42	67.0	3.93	Boca	78	39	48.2	0.10
Citronelle †	91	43	68.2	4.16	Borden	96	48	63.7	0.77
Columbiana †	75	42	65.0	3.91	Boulder Creek*	87	41	60.8	0.39
Decatur †	.....	.....	.....	1.55	Brentwood*	87	52	67.2	0.62
Elkmont † *	85	40	61.2	1.40	Brighton*	87	51	64.6	0.11
Florence	79	41	57.5	1.49	Byron*	84	56	66.7	0.49
Gadsden †	85	34	62.0	2.90	Cactus*	104	54	78.3	0.00
Greensborough †	84	42	66.0	6.62	Caliente*	91	45	66.7	0.60
Livingston*	83	40	63.7	4.93	Calistoga*	87	45	60.1	1.23
Mt. Vernon B'ks*	90	42	66.8	2.47	Castrovile*	71	42	57.9	1.00
Mount Willing †*	89	31	63.8	5.22	Centreville*	81	54	62.2	0.95
Motes*	88	39	65.2	1.70	Chico*	86	45	64.2	0.97
New Market†	83	30	58.8	4.57	Cisco*	68	28	44.3	1.65
Talladega	82	36	63.0	4.50	Colegrove	.....	.....	.....	0.26
Tig. g.	88	50	65.5	3.74	Coles*	83	35	53.2	0.96
Tuscaloosa	80	37	65.7	5.99	Colfax*	79	36	54.8	3.00
Tuscumbia	85	41	62.2	1.70	Colton*	102	48	67.1	1.02
Union Springs	85	42	64.0	4.27	Corning*	83	45	63.4	0.55
Uniontown	84	41	67.5	5.25	Crescent City	.....	.....	.....	5.75
Valley Head†	81	32	57.9	2.85	Cuyama*	92	42	59.6	0.14
Wiggins	90	37	65.2	2.69	Davisville*	89	52	64.5	1.17
Arizona.	.....	.....	.....	.....	Delano*	97	50	65.6	0.22
Antelope Valley	.....	.....	.....	0.00	Delta	88	38	59.1	2.91
Benson*	92	50	70.3	0.00	Downey*	90	48	65.6	0.48
Casa Grande*	99	54	74.2	0.10	Dunnigan*	80	51	64.5	1.49
Cedar Springs†	.....	.....	.....	0.22	Dunsmuir*	94	39	51.3	2.43
Curtis*	.....	.....	.....	0.05	Edgewood	75	32	50.7	0.69
Flagstaff	25	.....	.....	0.75	El Dorado*	86	46	62.3	1.60
Florence	99	44	69.6	0.13	Elmira*	95	45	66.9	0.59
Fort Apache	86	32	54.9	0.30	Emigrant Gap*	72	27	45.4	2.29
Fort Bowie	86	40	64.2	0.22	Esperanza*	88	42	63.9	0.60
Fort Huachuca	90	37	63.4	0.22	Evergreen	.....	.....	.....	1.06
Fort Lowell	100	36	66.2	0.30	Farmington*	91	51	64.5	0.20
Fort McDowell	103	39	63.1	0.10	Florence*	90	51	64.3	0.02
Fort Mojave	103	34	69.1	0.71	Folsom*	88	53	66.3	0.39
Fort Verde	94	34	60.6	0.70	Fort Bidwell	80	22	51.4	1.03
Globe	94	.....	.....	0.43	Fort Guston	85	21	53.6	2.90
Holbrook*	89	29	59.5	0.10	Fort Mason	72	46	57.9	0.67
Maricopa*	97	58	73.9	0.00	Fresno*	94	50	69.1	0.77
Mount Huachuca*	88	42	60.3	0.14	Fruto*	87	42	64.0	0.92
New River	78	42	57.8	0.00	Georgetown	78h	34	54.8	2.77
Pantano*	98	42	68.5	0.88	Gilroy*	85	45	61.3d	0.63
Pecoria	101	44	69.2	0.01	Girard*	89	40	55.8	0.49
Phoenix	100	47	70.0	0.14	Glen Ellen*	85	45	58.9	1.27
San Carlos	.....	.....	.....	0.30	Goshen*	92	50	68.7	0.28
San Simon*	102	40	63.7	T	Grass Valley	.....	.....	.....	3.87
Tombstone	86	45	.....	0.00	Hanford d*	90	50	64.6	0.63
Tevislon	.....	.....	.....	0.20	Hollister*	85	52	64.0	0.81
Texas Hill†	106	63	80.6	0.00	Hornbrook*	90	29	56.3	0.43
Tucson (1)	95j	43	69.0	0.18	Indio*	105	54	74.2	0.00
Tucson (2)*	97	45	67.7	0.70	Ione*	90	45	62.8	0.25
Volunteer Springs	82	22	.....	0.00	Jolon	.....	.....	.....	0.59
Wilcox*	95	41	67.8	?	Keeler*	84	46	63.2	0.12
Williams	76	21	47.8	0.05	Keene*	84	35	55.9	0.95
Winslow	86	21	53.6	0.02	Kingsburgh*	94	52	68.2	0.47
Arkansas.	.....	.....	.....	King City*	82	38	54.2	0.29	
Alexander	82	44	63.3	6.54	Knight's Landing*	95	44	62.6	0.42
Arkansas City†	.....	.....	.....	LaGrange*	94	41	62.9	0.58	
Camden †	85	45	66.1	5.39	Lathrop*	87	40	60.3	0.33
Conway	83	47	64.6	2.06	Laurel*	86	47	60.2	1.39
Dallas†	81	40	62.1	2.75	Lemoore*	96	50	67.8	1.70
Dardanelle†	.....	.....	.....	Livermore*	85	47	59.0	0.51	
Dayton†	82	48	64.1	2.60	Long Beach*	86	49	66.2	....
Forrest City	87	44	67.7	4.12	Los Angeles*	91	50	63.5	0.25
Fulton†	.....	.....	.....	Los Gatos*	85	46	63.4	0.74	
Heber	85	40	61.7	0.50	Mammoth Tunk*	106	54	79.3	0.00
Helena (1)†	.....	.....	.....	Martinez*	76	44	59.6	0.60	
Helena (2)	85	42	65.7	3.90	Marysville*	85	55	69.5	1.00
Hot Springs	85	40	64.5	3.95	Menlo Park*	81	46	59.1	0.69
Lead Hill	90	36	63.1	1.57	Merced*	92	46	63.3	0.20
Little Rock B'ks	86	38	64.0	4.48	Modesto*	86	48	69.6	0.19
Lonoke	81	45	66.0	2.62	Mojave*	99	40	61.0	0.00
Madison†	.....	.....	.....	Montague*	84	41	62.0	0.55	
Newport (1)†	.....	.....	.....	Monterey * (Hotel del Monte)	70	52	60.6	....	
Newport (2)	83	36	62.1	3.30	Monterey * (Hotel del Monte)	70	30	50.3	1.92
Osceola†	84	38	61.7	1.48	Mount Hamilton	74	30	50.3	1.92
Ozone†	78	43	61.7	1.96	Newark*	80	50	61.6	0.72
Russellville	85	41	69.6	2.00	Newhall*	93	38	61.1	0.40
Stuttgart†	82	44	63.4	4.07	Newman*	90	40	62.4	0.25
Texarkana	88	33	63.4	.....	Niles*	83	53	63.2	0.82
Washington†	85	42	66.1	2.92	Norwalk*	95	55	67.1	0.27
British Columbia.	.....	.....	.....	Oakland (1)	74	48	59.0	0.93	
New Westminster	71	35	51.8	2.69	Oakland (2)*	70	50	59.6	0.71
Canada.	.....	.....	.....	Ontario*	98	50	69.6	0.39	
McGill College, (Montreal).	74	24	43.3	2.15	Oroville*	82	45	63.1	1.61
California.	.....	.....	.....	Orland*	90	52	70.0	1.02	
Alacade*	98	48	67.4	1.40	Pajaro*	84	41	60.2	0.87
Alcatraz Island	70	49	57.2	0.53	Paso Robles*	88	43	68.6	0.45
Almaden*	85	48	62.7	0.79	Petaluma*	81	47	59.4	1.34
Anaheim*	94	54	65.5	0.24	Placerville*	83	42	58.8	1.99
Anderson†	88	44	62.2	4.03	Pomona*	88	56	68.7	0.57
Angel Island	77	40	59.8	1.08	Presidio of San F.	70	43	56.2	0.45
Antioch*	87	43	60.4	0.46	Puente*	93	52	63.0	0.95
Apots*	75	45	59.7	0.85	Red Bluff*	86	48	62.2	0.69
Athione*	95	47	67.1	0.77	Redding*	88	43	63.5	2.33
Auburn*	83	44	59.3	1.36	Riverside*	98	43	62.3	1.09
Bakersfield*	93	54	70.0	0.15	Rocklin*	88	44	62.9	

## Meteorological record of voluntary observers, &amp;c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.			
	Max.	Min.	Mean			Max.	Min.	Mean				
California—Cont'd.	0	0	0	Ins.	Colorado—Cont'd.	0	0	0	Ins.			
Sacramento (2)*	80	52	62.4	0.15	Rifle Falls	.....	47.6	0.85	Dwight			
Salinas (1)*	76	48	56.9	0.95	River Bend	.....	47.8	76	25			
Salinas (2)	72	50	57.8	0.82	Rocky Ford (1)	89 d	30	56.0	2.12			
Salton*	109	50	79.8	0.00	Rocky Ford (2)	.....	55.5	2.12	Flora			
Sanger Junction*	98	49	68.0	0.84	Saguache	76	16	46.8	2.12	Fort Sheridan		
San Ardo*	90	50	60.6	0.49	San Luis Exp'l Sta.	.....	46.9	1.20	Gibson City			
San Bernardino	90	49	62.0	2.05	Canton	82	26	46.9	2.45	Golconda		
San Diego B's	86	48	61.8	0.17	Sun View	.....	50.0	0.50	Grand Tower†			
San Fernando*	94	46	64.8	0.56	T. S. Ranch	.....	54.8	0.50	Greenville			
San Gabriel*	95	50	66.6	0.40	Thon	.....	47.5	0.00	Griggsville			
San Jose*	80	47	59.7	0.79	Watkins	.....	49.5	0.00	Hennepin			
San Luis Obispo	93	43	60.0	0.61	Connecticut.	.....	.....	.....	Hillsborough d			
San Mateo*	76	50	58.6	0.84	Birmingham	.....	4.10	.....	Lacon			
San Miguel*	88	49	59.6	0.32	Clark's Falls	82	26	4.10	Lake Forest			
San Pedro*	84	40	65.8	0.00	Canton	.....	4.02	.....	Lacon			
Santa Anna*	92	54	66.3	0.66	Colchester	76	28	48.3	2.12	Lanark		
Santa Barbara (1)	88	44	59.9	0.49	Fort Trumbull	71	30	48.5	4.25	Martinsville		
Santa Barbara (2)*	86	52	64.8	0.53	Hartford (1)	78	26	49.9	3.23	Mascoutah		
Santa Clara	.....	.....	.....	.....	Hartford (2)	.....	3.19	.....	Mattoon (1)*			
Santa Cruz*	80	48	59.7	0.84	Lake Kononoc	.....	5.47	.....	Mattoon (2)			
Santa Maria	88	37	61.8	0.97	Mansfield	68	26	45.6	0.00	McLeansborough		
Santa Margarita*	88	42	62.5	0.03	Middletown	78	30	48.7	4.04	Mount Carmel†		
Santa Monica	72	52	63.1	0.00	New Hartford (1)*	77	22	43.6	3.34	Mount Carmel†		
Santa Paula*	90	50	66.8	0.36	New Hartford (2)	.....	.....	.....	Mount Morris*			
Santa Rosa*	81	43	58.5	1.09	North Woodstock	92	33	2.46	75	26	47.8	3.00
Selma*	92	46	63.9	0.47	Shelton	73	25	48.4	3.46	Olney		
Seven Palms*	109	57	79.6	0.00	Thompson	75	28	44.4	5.39	Oswego*		
Shingle Springs*	70	44	54.6	1.98	Uncasville	.....	.....	.....	Otsego (1)*			
Sims*	90	29	56.8	1.87	Voluntown	72	35	47.9	4.47	Otsego (2)*		
Soledad*	84	40	58.0	0.30	Wallingford	.....	4.99	.....	Petersburgh			
Soquel*	76	48	60.4	0.00	Waterbury	75	28	47.4	4.29	Philo		
South Side*	92	40	66.6	0.32	Dakota.	.....	.....	.....	Pontiac			
South Vallejo*	73	46	57.3	0.73	Brookings	83	12	47.6	1.02	Richview		
Spadra*	94	48	62.1	0.47	Carrington	87	17	48.4	1.07	Riley		
Steeces*	88	41	59.2	1.02	Davenport	83	21	47.4	1.23	Rochester Island Ars'.		
Stockton (1)	.....	.....	0.24	De Smet†	30	46.6	2.36	75	26	50.6	4.18	
Stockton (2)*	79	50	60.5	0.19	Fort A. Lincoln	83	21	48.5	0.00	Rockford		
Suisun*	90	48	63.9	0.43	Fort Bennett	87	24	53.2	2.66	Sandwich		
Summit*	60	22	40.4	?	Fort Meade	72	20	46.7	2.64	South Evanston f.		
Susaville†	78	35	53.6	1.07	Fort Buford	81	12	50.7	0.60	Sterling		
Tehachapi*	78	37	55.4	0.00	Fort Pembina	74	11	41.3	0.71	Summer		
Tehama*	81	50	65.6	0.62	Fort Randall	86	27	55.1	1.95	Sycamore*		
Templeton*	89	48	61.9	0.54	Fort Sisseton	78	17	46.3	1.52	Warsaw†		
Towles*	78	38	55.0	0.00	Fort Sully	87	27	53.9	3.03	Watseka		
Tracy*	82	47	61.6	0.30	Fort Totten	84	19	45.4	0.78	White Hall		
Traver*	88	42	65.4	0.72	Fort Yates	87	26	49.1	0.21	Willow Hill		
Tropico*	94	43	62.6	?	Gallatin	84	16	45.4	0.00	Windsor†		
Truckee*	76	30	50.3	0.01	Garden City*	79	21	46.1	1.53	Winnebago		
Tulare*	96	50	68.4	0.66	Kimball†	84*	24	47.4	2.40	Indiana.		
Turlock*	92	49	64.5	0.17	New England City†	85	19	46.7	0.84	Angola		
Vacaville (1)*	84	50	61.0	0.98	Onida*	78	28	45.3	2.00	Blue Lick		
Vacaville (2)*	84	48	62.4	0.80	Redfield†	71	20	46.4	2.27	Butlerville		
Valley Springs*	87	52	64.8	0.61	Spearfish†	78	33	50.2	3.87	Cannelton		
Vina*	90	46	63.5	1.19	Spring Lake*	84	32	47.7	2.40	Columbia City		
Volcano Springs*	110	60	81.8	0.00	Steele†	84	10	47.0	0.57	Columbus		
Walla Walla Creek*	78	30	48.6	1.66	Webster†	81	14	48.7	2.03	Connersville		
Wheatland*	83	42	60.3	0.80	Wolsey*	80	20	47.6	3.00	Diana*		
Westley*	89	47	69.7	0.41	Woonsocket	88	18	49.1	2.52	Delphi		
Whittier*	96	50	65.4	0.15	Delaware.	.....	.....	.....	Elgin			
Williams*	70	52	59.9	0.15	Kirkwood*	76	32	52.0	0.00	Englewood*		
Willow (1)*	87	38	61.6	0.30	Newark	76	29	52.6	0.87	Evansville†		
Willow (2)*	80	44	59.7	0.27	District of Columbia.	76	29	52.6	0.87	Farmiland		
Winters*	100	49	67.4	0.58	Kendall Green*	74	35	53.6	7.97	Franklin		
Woodland*	74	50	59.9	0.62	Washington B'sks.	80	33	55.6	9.59	Huntington		
Colorado.	.....	.....	.....	Altamonte Springs†	86	44	60.2	0.84	Huntington			
Alma	60	- 1	33.2	1.02	Alvata†	91	43	68.8	1.75	Jeffersonville		
Aspen	.....	.....	41.8	0.55	Archer†	89	41	65.7	3.70	Jeffersonville		
Bennet*	90	24	33.1	.....	Fort Barrancas	87	39	66.8	1.64	Laconia†		
Breckenridge	72	- 5	38.0	.....	Fort Meade†	84	39	65.0	1.47	Lafayette		
Byers*	.....	.....	52.9	1.51	Homeland*	88	45	70.2	1.40	Largo		
Canon City	82	26	54.2	1.92	Kissimmee City	90	42	69.1	1.47	Layton		
Cheyenne Wells	.....	.....	50.7	1.93	Lake City†	94	39	68.0	3.50	Lodi		
Clinax	.....	.....	31.8	2.13	Manatee†	91	44	66.5	1.68	Louisburg		
Coulter†	69	14	41.4	0.64	Matanzas†	83	50	66.1	2.67	Lyons		
Deer Trail	.....	.....	43.8	0.00	Morritt's Island†	85	53	68.0	4.75	Madison		
Delta†	92	26*	54.1	0.40	St. Francis B'sks.	84	45	66.8	2.19	McAllister		
Denver (Jesuit Col)	79	24	51.4	2.43	Tallahassee†	88	46	66.0	3.20	McAllister		
Dolly Varden Mine	41	4	20.4	0.00	Villa City†	88	53	69.9	2.05	McAllister		
Durango†	.....	.....	1.00	.....	Georgia.	.....	.....	.....	McAllister			
Eagle Farm	.....	.....	2.80	.....	Andersonville†	91	30	61.4	2.92	McAllister		
Fraser*	78	12	37.4	1.05	Athens	86	35	63.2	2.15	McAllister		
First View	.....	.....	49.4	1.90	Diamond†	82	42	61.0	4.25	McAllister		
Fort Collins	79	24	49.8	2.07	Duck†	80	26	57.4	2.46	McAllister		
Fort Crawford	81	22	52.4	0.78	Ernestus†	74	44	60.0	1.87	McAllister		
Fort Lewis	77	26	47.2	0.20	Forsyth†	88	42	66.7	3.52	McAllister		
Fort Logan	83	29	52.3	1.05	Marietta†	84	33	61.4	2.44	McAllister		
Fort Lyon	89	25	54.3	1.19	Milledgeville†	84	36	62.8	4.30	McAllister		
Glenwoodtown	64	22	42.4	0.91	Quitman†	87	45	67.7	2.70	McAllister		
Glenwood Springs	86	23	52.9	0.54	Thomasville	89	40	66.0	2.78	McAllister		
Grand Lake*	71	26	41.2	0.70	Woolley's Ford	88	38	59.2	0.00	McAllister		
Greeley	88	28	51.5	1.95	Idaho.	.....	.....	.....	McAllister			
Hartsel	66	- 15	36.6	0.00	Aurora	75	28	49.2	2.63	McAllister		
Hugo	.....	.....	50.6	0.00	Beardstown†	76	25	51.1	0.95	McAllister		
Husted	.....	.....	34.0	0.00	Belvidere	73	25	46.8	2.12	McAllister		
Idaho Springs	77	23	49.2	2.17	Brush Hill	81	33	54.8	2.00	McAllister		
Julesburg	21	44.0	51.4	0.00	Cedarville	76	23	47.6	2.72	McAllister		
Kit Carson	84	22	49.7	3.05	Centralia	85	31	57.0	1.50	McAllister		
Leadville	58	10	35.6	1.31	Charleston	79	24	52.7	0.90	McAllister		
Lamar	.....	.....	3.34	0.00	Collinsville	81	28	56.6	1.72	McAllister		
Longmont†	88	24	50.5	1.71	.....	.....	.....	.....	McAllister			
Magnolia	.....	.....	56.0	0.00	.....	.....	.....	.....	McAllister			
Monte Vista	77	20	35.8	0.99	.....	.....	.....	.....	McAllister			
Palmer Lake	72	23	46.7	2.94	.....	.....	.....	.....	McAllister			
Paoli	.....	.....	50.4	4.61	.....	.....	.....	.....	McAllister			
Ranch near Como.	60	10	37.0	1.33	.....	.....	.....	.....	McAllister			

## Meteorological record of voluntary observers, &amp;c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean			Max.	Min.	Mean	
Illinois—Cont'd.	0	0	0	Ins.	Illinois—Cont'd.	0	0	0	Ins.	Illinois—Cont'd.	0	0	0	Ins.
Rifle Falls	76	2												

## Meteorological record of voluntary observers, &amp;c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.					
	Max.	Min.	Mean			Max.	Min.	Mean						
Kansas—Cont'd.	°	°	°	Ins.	Maryland—Cont'd.	°	°	°	Ins.					
Sharon Springs	2.41	2.96	2.63	McDonough	77	53.7	52.7	4.83	Colon	68	20	43.5	0.80	
Shields	1.64	3.54	2.05	Mt. St. Mary's Col.	80	52.6	4.17	1.92	Concord	78	20	45.1	0.92	
Tribunet	1.29	3.28	1.79	Woolstock	78	53.3	6.15	1.68	Deer Lake	78	20	42.9	1.68	
Victoria	1.29	3.0	60.5	Massachusetts	Amherst	80	48.8	3.22	1.63	East Saginaw	76	21	45.1	1.63
Wakefield	1.29	3.8	57.5	Amherst Ex Sta.(1)	78	25	47.4	2.42	East Tawas	67	11	43.8	0.61	
Wa Keeney	1.29	3.6	42.4	Amherst Ex Sta.(2)	78	30	50.8	2.87	Eden	76	17	46.6	1.76	
Walker	1.29	3.2	2.9	Blue Hill (sum't.)	76	28	44.8	4.13	Ewart	77	16	44.8	0.75	
Wallace	1.29	2.9	2.79	Blue Hill (base)	78	25	47.4	4.44	Fitchburg	75	20	44.8	1.57	
Wellington	1.29	3.3	58.3	Blue Hill (valley)	80	40.4	3.92	1.42	Flint	75	12	40.1	1.47	
Winona	1.29	3.2	57.9	Cambridge (1)	77	25	49.6	2.54	Ford Mackinac	63	11	40.5	0.72	
Wilson	1.29	4.0	54.9	Cambridge (2)	77	25	47.6	3.73	Ford Wayne	76	20	46.3	1.42	
Yates Center	1.29	2.9	55.8	Chestnut Hill	80	28	47.4	4.02	Gladwin	82	15	45.6	0.80	
Kentucky	1.29	1.29	1.29	Chicopee	78	25	47.4	2.78	Grand Rapids	73	20	45.7	1.90	
Ashland†	2.97	25	49.3	Clinton	78	25	47.4	3.70	Grupe	74	12	47.1	0.69	
Bernstadt†	3.70	26	57.6	Cotuit	64	45.0	4.44	1.42	Gulliver's Lake	63	14	38.9	1.95	
Bowling Green	2.54	28	61.0	Deerfield (1)	79	48.2	2.40	1.42	Hanover	75	18	45.5	1.16	
Burnside†	3.65	3.65	3.65	Deerfield (2)	81	31	48.9	1.53	Harrisville	71	19	41.1	1.16	
Catlettsburgh	2.48	2.48	2.48	Dudley	80	27	47.6	2.55	Hart	74	20	44.2	2.20	
Eddyville†	0.99	1.22	1.22	Fall River (1)†	74	33	49.2	4.95	Hastings	73	20	44.6	1.53	
Falmouth (1)†	1.31	28	53.7	Fall River (2)†	74	25	46.5	5.26	Highland Station	76	20	44.0	1.46	
Franklin†	1.22	38	61.0	Framingham	79	26	47.8	3.59	Hillman	75	17	41.4	1.53	
Frankfort (1)	1.33	26	55.0	Fiskdale	78	25	47.4	2.45	Hillsdale	89	15	47.1	0.99	
Frankfort (2)†	1.29	2.28	2.28	Fitchburg (1)	75	31	46.1	3.12	Hudson	89	15	47.1	0.39	
Greensburg†	1.44	1.44	1.44	Fitchburg (2)†	81	24	47.4	3.07	Ionia	72	20	42.5	1.39	
Louisa†	1.29	32	57.7	Fort Warren	74	31	46.0	2.03	Jeddo	76	25	47.3	0.83	
Madisonville†	1.50	1.25	1.25	Gilbertville	78	25	47.5	2.03	Kalamazoo	74	20	48.0	1.11	
McHenry†	1.00	38	60.1	Groton	80	26	48.7	3.27	Kenockee	74	19	46.6	1.85	
Millersburg†	1.36	34	57.3	Heath	80	24	45.0	1.22	Lansing	74	19	46.6	1.70	
Mount Sterling†	1.97	27	53.3	Holyoke	82	30	50.7	2.14	Lathrop	68	18	39.7	2.42	
Newport Barracks	1.00	25	54.0	Lake Cochituate	83	20	47.1	3.17	Madison	68	20	43.6	0.79	
Owensborough†	1.29	30	60.3	Lawrence	78	27	48.7	4.12	Manchester	76	20	48.0	0.67	
Owenton†	1.20	24	56.2	Leicester	76	27	43.6	3.97	Marshall	76	20	44.4	1.90	
Paducah†	1.34	28	57.6	Leominster	77	20	45.9	2.73	May	59	23	43.0	0.95	
Pellville†	0.93	28	57.6	Long Plain	68	28	46.6	5.51	Montague	71	20	41.4	1.05	
Richmond†	1.09	25	56.3	Lowell (1)	78	27	47.8	3.63	Mottville	76	20	45.4	1.02	
Shebillye†	1.09	25	56.2	Lowell (2)	80	25	47.6	1.22	Noble	76	12	44.4	0.95	
South Fork†	2.55	30	56.3	Lowdieu	77	20	45.9	2.73	North Adams	76	12	44.4	2.01	
Williamsburgh†	1.29	3.73	1.29	Lynn	70	29	46.2	2.97	North Aurelius	76	12	45.5	1.85	
Louisiana	1.29	1.29	1.29	Mansfield	74	25	46.1	4.70	North Marshall	74	18	43.6	1.85	
Amite City	3.62	45	66.6	Medford	74	25	46.1	4.70	Olivet	73	16	44.8	1.61	
Arcadia	4.85	45	67.5	Middleborough	73	23	46.4	4.47	Ovid	74	20	43.6	1.44	
Abbeville	1.18	53	69.6	Milton*	76	28	46.3	3.95	Paw Paw	75	15	44.6	1.24	
Alexandria	2.20	45	68.2	Monson	79	23	47.0	2.87	Petersburgh	78	24	44.8	1.54	
Baton Rouge	3.66	85	60.2	Mystic Lake	78	25	46.3	2.02	Pontiac	73	24	46.9	1.75	
Cameron†	1.29	52	70.5	Mount Nonotuck	78	25	47.4	2.02	Pulaski	66	22	45.0	0.77	
Clinton	1.29	43	66.7	Mystic Station	78	25	46.1	3.65	Rawsonville	78	22	47.4	0.60	
Convent	1.35	44	67.2	New Bedford (1)	66	30	45.4	4.32	Romeo	77	21	43.5	0.66	
Coushatta†	1.16	51	68.5	New Bedford (2)	67	27	46.6	4.22	Roscommon	73	17	42.3	1.66	
Crowley	1.29	51	68.5	New Bedford (3)	66	30	46.1	4.31	Saint Ignace	65	17	38.6	0.96	
Delhi†	1.00	31	69.5	Newburyport (1)	76	30	46.5	3.55	Saint John's	73	23	43.3	1.97	
Donaldsonville	1.47	47	63.8	Newburyport (2)	77	22	46.4	3.77	Sand Beach	62	21	41.6	0.85	
Farmerville	1.47	46	66.0	Northampton	79	29	49.2	2.63	Standish	80	22	45.3	0.10	
Franklin†	1.05	51	68.8	North Billerica	82	26	48.3	3.81	Stanton	72	20	43.6	1.45	
Girard†	1.29	36	62.4	Plymouth	75	35	48.4	6.66	Stockbridge	78	22	46.2	1.21	
Grand Cane	1.29	50	69.1	Randolph	78	25	46.4	4.64	Thornhill	76	22	46.2	1.34	
Grand Coteau	1.29	51	70.2	Rowe	76	24	43.5	2.80	Traverse City (1)	75	21	43.0	2.97	
Hammond	1.29	43	68.2	Royalston	80	36	49.6	3.50	Traverse City (2)	72	20	43.4	2.67	
Hounsf†	1.41	50	69.2	Salem	76	33	48.4	3.60	Vandalia	68	20	42.6	1.15	
Jackson Barracks	1.29	48	69.6	Somerset	78	28	49.2	4.84	Venicia	73	19	42.2	1.61	
Jeanerette	1.29	55	70.3	South Hingham	76	16	43.3	4.13	Washington	75	19	42.2	1.61	
Jennings	1.29	50	74.0	Springfield Arm'y	78	30	49.7	2.26	Weldon Creek	75	19	42.2	1.88	
La Fayette	1.29	52	60.8	Taunton (1)	80	47.7	4.62	1.42	Williamston	72	22	45.1	1.66	
Lake Charles	1.29	41	63.4	Taunton (2)	76	28	47.8	4.75	Ypsilanti (1)	76	20	44.8	1.49	
Lake Providence	1.29	49	69.6	Taunton (3)	77	22	46.6	4.34	Ypsilanti (2)	78*	20	46.9	1.38	
Liberty Hill	1.29	42	68.0	Waltham	77	22	46.4	4.35	Minnesota	1.29	1.29	1.29	1.97	
Luling	1.29	41	64.0	Wellesley	73	26	48.5	5.36	Alexandria	71	26	47.6	1.97	
Mandeville	1.29	41	68.2	Westborough	83	24	49.5	3.47	Brainard	71	26	47.6	2.06	
Maurepas	1.00	40	67.8	Williamstown	75	26	47.2	2.31	Farmington	78	26	48.4	2.06	
Marksville†	1.75	48	68.2	Winchester	75	26	47.2	4.31	Fergus Fallst	78	26	48.4	0.88	
Melville	1.29	45	70.0	Worcester (1)	83	30	47.1	4.02	Fort Ripley†	81	25	49.6	1.90	
Monroe	1.29	47	67.9	Worcester (2)	79	31	47.8	4.21	Grand Meadow	80	28	44.8	1.12	
Mount Airy	1.12	47	69.9	Wellesley	84	48	66.6	0.71	Li. Winnibigoshish	70	21	42.8	1.83	
New Iberia	1.29	53	70.4	Mexico	80	49	64.2	0.31	Minneapolis*	74	28	46.4	1.53	
Plaquemine	1.29	40	69.0	Mexico	100	52	72.6	0.04	Morris	75	23	46.8	1.58	
Port Eads	1.17	58	69.1	La Logia*	100	52	72.6	0.04	Northfield	78	23	48.0	1.72	
Rayville	1.29	49	72.7	Guanajuata	84	48	66.6	0.71	Ortoville†	78	23	46.8	0.87	
Saint Joseph	1.29	49	72.7	La Logia*	88	50	64.4	0.09	Pine River	68	18	43.6	2.30	
Shell Beach	1.29	61	71.3	Mazatlan	83	66	76.3	0.36	Pokogame Falls	72	13	39.2	1.82	
Sugar Ex. station	1.29	52	67.2	Mexico	80	49	64.2	0.31	Red Wing	78	27	47.1	3.35	
Thibodeaux	1.29	23	72.3	Topolobampo	88	68	76.9	0.00	Redwood Fallet	78	27	47.1	0.74	
Trinity	1.29	48	67.0	Topo Chico	90	68	77.0	0.08	Rolling Green	75	28	47.4	1.55	
Vidalia	1.29	41	70.4	Zacatecas	84	42	60.4	0.34	Tracy†	78	28	51.1	0.18	
Maine	1.29	28	44.4	Michigan	Adamsville	.....	.....	.....	Mississippi	78	27	49.5	2.27	
Bar Harbor	1.29	28	44.4	Adrian	78	21	44.4	0.86	Agricultur' Collegiat	85	37	64.9	4.18	
Belfast	1.29	32	47.7	Albion	78	21	44.4	1.29	Batesville	85	37	63.1	1.45	
Calais	1.29	24	45.0	Allegan	75	20	42.3	2.28	Booneville	83	34	63.6	1.25	
Cornish	1.29	27	46.4	Alma	73									

## Meteorological record of voluntary observers, &amp;c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Nevada—Cont'd.	o	o	o	Ins.	New York—Cont'd.	o	o	o	Ins.
Fort McDermitt	81	21	52.2	0.78	Angelica t.....	82	21	43.3	3.81
Golconda	80	38	54.4	0.95	Ardencie t.....	77	36	50.8	2.81
Halleck	90	30	54.1	0.27	Burnes' Corners t.....	75	22	41.2	3.08
Hawthorne	84	32	57.2	0.15	Boyd's Corners*	80	31	51.2	4.42
Hot Springs (1)*	85	40	60.8	0.00	Central P'k, N.Y.Cy.	78	34	51.2	5.47
Hot Springs (2)	85	38	59.7	0.77	Constableville t.....	75	15	41.8	1.93
Humboldt	84	36	54.3	0.20	Cooperstown	76	29	44.3	2.93
Lower's Ranch	78	26	52.6	0.13	Davids Island	74	23	46.7	5.48
Mill City	90	30	59.2	0.60	Eden	75	32	43.8	7.00
Montello	84	35	52.9	0.65	Elmira t.....	74	30	47.6	2.36
Palisade	92	39	57.1	0.37	Factoryville t.....	80	23	45.0	2.75
Pioche	84	20	50.8	1.30	Fleming	72m	26	43.4	...
Pyramid Agency	84	23	53.8	T	Fort Columbus	73	34	50.6	5.33
Reno (1)*	76	36	52.5	0.00	Fort Hamilton	74	33	49.0	5.34
Reno (2)	80	25	52.2	0.03	Fort Niagara	78	27	45.1	2.13
Ruby Hill	69	18	42.2	0.10	Fort Porter	75	27	42.5	3.25
Saint Clair	81	21	50.8	0.00	Fort Schuyler	71	34	48.4	4.03
Tecoma*	84	38	56.3	1.00	Fort Wadsworth	79	29	50.4	5.54
Toano	78	36	56.1	1.13	Friendship	76	26	44.3	4.53
Tuscarora	75	20	46.8	0.10	Geneva	80*	23	45.6	3.82
Verdi	80	30	50.2	0.14	Hess Road Sta. t.....	76	30	44.4	6.04
Virginia City	84	33	59.0	0.00	Humphrey t.....	80	25	45.4	2.40
Wadsworth	84	33	59.0	0.00	Ijion t.....	83	22	45.4	2.15
Wellington	73	24	46.8	0.25	Ithaca	80	26	45.7	3.43
Wells	75	22	51.2	0.00	Le Roy	85	25	44.8	3.11
Winemucca*	82	34	56.5	0.17	Lyons	83	28	46.0	3.39
New Hampshire	.....	.....	.....	.....	Madison Barracks	84	23	43.7	4.90
Antrim	.....	.....	2.27	.....	Middleburgh	84	12	47.0	3.20
Belmont	.....	.....	2.06	.....	Nineveh	82	24	47.9	2.78
Berlin Falls	77	10	42.4	.....	North Hammond t.....	80	25	44.8	2.17
Berlin Mills	82	18	46.3	1.52	Number Four t.....	73	13	38.2	2.38
Bristol	.....	.....	2.24	.....	Palermo t.....	83	23	44.2	2.05
Concord	79	23	48.6	2.09	Potsdam*	84	24	45.1	4.18
Hanover	79	21	46.5	0.97	Pulnayra*	88	32	47.4	2.66
Lake Village	77	21	46.5	2.36	Pendleton Centre*	30	24	42.6	2.13
Manchester (1)	80	24	48.5	2.76	Perry City	80	28	43.1	2.55
Manchester (2)	78	23	48.2	2.55	Plattsburgh B'ks	75	19	47.3	3.70
Manchester (3)	79	24	47.5	2.45	Queensbury t.....	32	44.8	3.00	
Mine Falls	79	25	48.0	2.76	Salem	78	23	47.6	3.10
Nashua	82	25	48.0	2.76	Savonut	83	22	45.7	3.10
Newton	76	25	46.8	3.89	Saranac Lake t.....	73	14	41.6	2.15
North Chesterfield	85	15	44.3	1.40	Setaukot	74	35	48.3	3.57
North Conway	81	24	48.2	2.45	Somerset*	83	30	43.3	2.88
North Sutton	77	28	44.4	2.29	South Canisteo*	83	28	45.0	4.96
Pennichuck Sta.	.....	.....	2.98	.....	South Kortright t.....	39	44.8	2.55	
Plymouth	85	18	46.8	1.60	Utica	84	24	45.6	1.20
Shaker Village	79	25	43.5	2.03	Watervliet Arsenal	80	27	49.8	1.20
Stratford	79	19	49.0	0.98	Wedgewood*	80	28	45.3	3.02
Walpole	78	19	43.8	1.60	West Point	76	24	46.7	4.56
West Milan	74	12	41.4	1.29	White Plains	74	38	50.2	5.02
Weir's Bridge	.....	.....	1.91	.....	Willet's Point	76	33	49.4	7.15
Wolfborough	.....	.....	2.33	.....	North Carolina	76	33	49.4	7.15
New Jersey	.....	.....	.....	.....	Asheville (1)t.....	.....	1.15	.....	.....
Allaire	73	25	48.8	.....	Asheville (2)	83	28	56.4	1.45
Ashbury Park	72	28	49.1	4.57	Chapel Hill	90	33	58.9	1.88
Beverly t.....	82	30	52.3	4.82	Charleston	.....	1.74	.....	.....
Billingsport L. H.	76	36	53.7	.....	Fayetteville t.....	90	44	59.4	1.77
Bridgeton	76	34	55.2	4.96	Hot Springs	85	31	58.1	2.20
Cape May C. H.	76	32	51.9	.....	Lenoir	85	39	58.7	2.17
Egg Harbor City	77	28	50.6	4.54	Morganston t.....	88	32	59.6	3.41
Freehold	76	28	50.2	6.31	Mount Airy t.....	86	34	56.1	3.41
Gillette	80	28	50.6	5.44	Mount Holly t.....	86	24	47.1	2.40
Hanover	77	28	50.2	7.02	Mount Pleasant t.....	88	32	58.9	1.45
Highland Park	77	29	50.7	5.01	Monroe t.....	85	36	60.4	1.78
Hopewell	77	29	50.7	5.40	Murphy	1.78	2.33	.....	.....
Jersey City	68	33	50.2	.....	Salisbury	85	41	61.8	1.85
Lambertville	78	33	52.9	4.83	Soapstone Mount	86	34	55.1	2.75
Locktown	76	27	51.0	5.99	Statesville	86	36	50.0	2.78
Madison	79	28	50.9	6.46	White Forest	88	32	58.6	4.34
Moorestown	77	30	51.1	3.84	Washington t.....	88	40	59.5	5.59
New Brunswick (1)	76	35	51.0	4.97	Weldon t.....	88	32	57.4	6.59
New Brunswick (2)	78	29	51.7	4.83	Oho.	.....	.....	.....	.....
New Brunswick (3)	79	28	51.3	4.82	Akron	80	22	47.3	1.70
Newark	79	35	51.3	6.24	Charleston	.....	1.74	.....	.....
Ocean City	71	34	50.8	5.60	Fayetteville t.....	90	44	59.4	1.77
Paterson	80	37	52.9	5.75	Franklin	80	24	45.6	3.75
Plainfield	77	36	51.4	4.31	Frederick	80	24	44.8	1.55
Princeton	80	27	49.2	7.25	Drofton t.....	77	26	47.1	5.89
Readington	78	31	51.4	3.80	Freeport t.....	82	20	44.1	3.24
Somerville	76	34	51.4	5.14	Germantown	76	34	49.3	2.47
South Orange	77	30	50.1	7.54	Carrollton t.....	25	14	47.6	3.09
Tenafly	83	25	49.1	6.92	Circleville t.....	78	19	47.1	4.50
Toin's River	84	28	50.1	.....	Clarksville	80	14	49.5	2.17
Trenton	77	24	48.6	.....	Clifton (1)t.....	80	21	47.2	4.53
Union	79	34	55.0	5.00	Clarion (2)	80	21	47.2	2.09
Woodbury	78	34	51.2	0.64	Contesville	83	27	49.6	7.03
New Mexico	.....	.....	.....	Confucius t.....	82	20	45.5	3.24	
Albuquerque	84	33	58.1	0.70	Columbus	82	20	45.5	3.24
Coolidge	80	25	50.5	4.40	Criford	77	27	49.6	7.03
Deining	89	43	65.4	0.05	Emporium	84	21	51.6	3.66
Fort Bayard	85	32	56.6	T	Fayetteville	84	22	43.4	2.75
Fort Marcy	78	24	51.7	0.64	Findlay	80	34	50.5	4.68
Fort Stanton	77	25	52.9	T	Frankford Arsenal	76	30	52.4	3.75
Fort Union	76	19	45.9	0.50	Franklin	80	24	45.6	3.70
Fort Wingate	77	26	51.6	.....	Frederick	77	26	47.1	5.89
Gallinas Spring t.....	81	33	58.2	2.52	Groton	80	22	47.3	2.75
Las Vegas t.....	79	24	52.4	2.15	Hartford	80	24	47.1	4.40
Lordburg	94	40	62.3	0.20	Hartford	80	24	47.1	4.40
Los Lunas t.....	92	44	63.4	.....	Hartford	80	24	47.1	4.40
Springer t.....	.....	.....	2.35	.....	Hartford	80	24	47.1	4.40
New York	.....	.....	.....	.....	Hartford	80	24	47.1	4.40
Alfred Centre g.....	78	22	44.7	2.25	Hartford	80	24	47.1	4.40
Canton t.....	81	23	43.9	2.16	Hartford	80	24	47.1	4.40

## Meteorological record of voluntary observers, &amp;c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Ohio—Cont'd.	o	o	o	Ins.	Ohio—Cont'd.	o	o	o	Ins.
Ardenie t.....	82	21	50.8	3.81	Mansfield t.....	77	36	42.3	2.79
Burnes' Corners t.....	75	22	41.2	3.08	Marietta (1)t.....	85	23	53.0	3.18
Boyd's Corners*	80	31	51.2	4.42	McConnelville	84	22	50.9	2.35
Central P'k, N.Y.Cy.	78	34	51.2	5.47	Napoleon t.....	80	21	49.2	1.60
Constableville t.....	75	15	41.8	1.93	New Alexandria	81	18	51.1	3.03
Cooperstown	76	29	44.3	2.93	New Comerstown	85	19	49.1	2.55
Davids Island	74	23	46.7	5.48	Oberlin	79	24	45.9	2.11
Eden	75	32	43.8	7.00	Oberlin	81	21	50.7	1.51
Elmira t.....	74	30	47.6	2.36	Oberlin	82	21	50.7	1.51
Factoryville t.....	80	23	45.0	2.75	Oberlin	83	21	50.7	1.51
Fleming	72m	26	43.4						

## Meteorological record of voluntary observers, &amp;c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Texas—Cont'd.	o	o	o	Ins.	Virginia—Cont'd.	o	o	o	Ins.
Edinburgh	52	45.1	51.1	3.64	Marion	80	24	52.5	2.18
Forestburgh	52	38	67.0	.....	Petersburg	81	33	55.4	6.22
Fort Bliss	95	55	74.2	2.68	Smithville	90	35	56.2	13.29
Fort Brown	92	55	64.9	1.68	Spottsville	88	32	56.2	11.40
Fort Clark	95	34	64.9	1.68	Summit	83	30	52.4	2.03
Fort Concho	95	44	69.2	2.03	University of Va.	.....	.....	.....	4.90
Fort Davis	86	33	63.6	0.58	Washington Territory	.....	.....	.....	.....
Fort Elliott	88	33	61.4	4.79	Blakely	77	35	51.0	1.90
Fort Hancock	97	32	69.6	0.58	Port Spokane	83	29	54.0	0.42
Fort McIntosh	96	48	73.8	2.46	Fort Townsend	72	35	52.4	1.38
Fort Ringgold	101	51	76.7	3.52	Fort Walla Walla	84	34	56.0	1.32
Fort Worth	41	.....	.....	.....	Vancouver B'ks	80	31	53.4	3.13
Fredricksburgh	.....	.....	.....	.....	Vashon	80	34	50.8	2.68
Gallinas f.	90	45	67.7	1.63	West Virginia	.....	.....	.....	.....
Granbury f.	88	49	65.0	2.39	Bucknham f.	.....	.....	.....	5.30
Houston	88	58	73.0	2.46	Charleston f.	.....	.....	.....	2.23
Howe f.	88	44	65.6	2.55	Glenville f.	.....	.....	.....	4.12
La Grange f.	56	71.2	3.41	Hinton f.	.....	.....	.....	1.91	
Lampasas f.	95	47	69.0	2.14	Morgantown f.	.....	.....	.....	4.97
Longview f.	88	47	68.6	6.70	Parkersburgh f.	73	22	42.2	1.62
Luling f.	91	50	71.1	1.73	Rockport	75	25	41.7	2.60
Merkel f.	44	68.1	0.38	Rock Spring	91	32	58.2	.....	
Mesquite f.	90	48	62.8	3.93	Rowlesburgh f.	.....	.....	.....	3.23
New Ulm	84	53	69.9	3.13	Wheeling f.	.....	.....	.....	2.37
New Braunfels	90*	44	62.2	1.93	White Sulph. Spgs.	.....	.....	.....	2.63
Pecos City f.	94	46	60.8	0.15	Weston f.	.....	.....	.....	4.99
San Antonio	87	49	69.6	2.87	Wisconsin	.....	.....	.....	.....
Santa Maria	.....	.....	.....	Chippewa Fallst.	.....	.....	.....	0.96	
Silver Falls f.	89	34	62.3	1.25	Cadiz	30	45.8	.....	.....
Snyder f.	44	56.3	0.05	Embarras	78	23	47.1	2.53	
Waco f.	90	47	69.9	2.00	Fond du Lac	80	24	48.1	1.20
Utah	.....	.....	.....	Friendship	69	23	46.2	1.02	
Blue Creek	94	40	61.6	0.50	Glasgow f.	62	28	46.1	1.27
Corinne	88	42	57.4	1.25	Grantsburg f.	78	24	49.0	2.55
Fort Douglas	83	167	53.7	2.57	Hayward f.	78	20	41.7	0.54
Fort DuChesne	84	23	51.9	0.68	Lincoln f.	29	45.3	0.70	.....
Kelton	88	34	55.3	0.92	Madison	72	26	47.9	1.71
Ogden	82	33	54.2	1.57	Manitowoc	77*	22	46.2	1.06
Price	.....	.....	.....	Oshkosh f.	77	22	45.4	0.72	
Promontory	82	30	54.1	0.04	Phillips f.	.....	.....	.....	0.50
Terrace	80	35	56.2	1.00	Portage f.	.....	.....	.....	2.20
Vermont	.....	.....	.....	Richland Centre f.	.....	.....	.....	2.37	
Brattleborough (1)	82	23	49.4	2.39	Summit Lake	80	30	48.5	2.37
Brattleborough (2)	83	26	48.9	1.51	Viroqua	16	41.1	10.38	.....
Burlington	78	25	47.2	1.51	Wauconsta	18	42.2	1.60	.....
Chelsea	70	24	42.8	1.28	Weston	20	42.5	.....	.....
Cornwall	.....	.....	.....	Wyoming	.....	.....	.....	.....	
Coventry	72	19	39.4	2.90	Camp Sheridan	69	19	42.8	0.92
East Berkshires	80	18	44.8	1.59	Camp Pilot Butte	79	9	46.6	0.59
Jacksonville	81	18	44.7	3.72	Carter	.....	.....	.....	1.30
Lunenburg	78	18	45.2	1.00	Fort Bridger	74	20	46.2	2.00
Saint Johnsbury	75*	18	42.1	1.46	Fort D. A. Russell	73	17	44.6	3.22
Saxton's River	81	19	46.1	1.43	Fort Laramie	82	24	51.3	1.13
Stratford	74*	24	46.5	2.46	Fort McKinney	72	29	50.0	0.43
Vernon	78	28	49.8	1.89	Fort Washakie	74	20	46.6	1.46
Virginia	.....	.....	.....	Sweetwater Bridge	.....	.....	.....	1.51	
Abingdon f.	.....	.....	.....	West Indies	.....	.....	.....	.....	
Alum Springs	82	28	54.0	3.54	Hamilton, Bermuda	74	60	68.0	8.66
Bird's Nest	86	33	54.5	11.25	Grand Turk Isl'd.	84	82	83.5	3.14
Bolar	76	24	48.6	3.05	Port au Prince (Hayti)	96	67	80.6	8.75
Christiansburg f.	79	20	49.5	2.34	.....	.....	.....	.....	
Dale Enterprise f.	88	22	57.9	3.83	.....	.....	.....	.....	
Fort Monroe	81	35	55.3	9.83	.....	.....	.....	.....	
Fort Myer	83	30	54.1	10.14	.....	.....	.....	.....	

## Reports received too late for publication in March.

Arizona	o	o	o	Ins.	California—Cont'd.	o	o	o	Ins.	
Maricopa	82	52	65.5	1.19	Stockton (2)	78	42	57.3	7.07	
Texas Hill	88	55	68.0	11.12	Susanville	70	27	46.2	4.81	
Yuma	79	55	66.4	0.15	Truckee	70	12	41.1	0.01	
California	.....	.....	.....	.....	Vacaville (2)*	78	42	57.0	7.99	
Benamont	74	43	56.2	5.27	Walla Walla Creek	74	24	45.8	3.85	
Berkeley	74	43	54.3	4.58	Walnut Creek	83	37	56.9	5.80	
Bishop Creek	82	40	55.9	1.46	Wheatland	76	40	56.0	5.52	
Boca	56	18	33.6	1.15	Whittier	95	42	63.6	3.65	
Centreville	80	50	58.8	5.59	Dakota	.....	.....	.....	.....	
Chico	80	45	58.9	5.68	Parkston	70	10	35.4	0.11	
Colton	88	40	60.2	4.47	Indiana	.....	.....	.....	.....	
Crescent City	.....	.....	.....	Laconia	79	24	47.4	0.50		
Cuyanna	81	39	56.3	6.52	Gardiner	60	8	33.7	2.76	
Evergreen	.....	.....	.....	Kennebec Arsenal	60	5	33.2	2.42		
Fresno	95	43	62.5	2.55	Kent's Hill	55	10	32.2d	2.95	
Galt	79	43	58.0	5.36	Nevada	.....	.....	.....	.....	
Grass Valley	.....	.....	.....	New Mexico	66	32	45.6	0.50		
Hedgesville	74	32	52.5	8.91	Deming	83	30	51.9	0.12	
Jolon	.....	.....	.....	New York	63	30	51.9	0.12		
LaGrange	80	41	60.3	4.24	Kingston	62	16	35.0	0.87	
Los Banos	.....	.....	.....	Oregon	.....	.....	.....	.....		
Los Gatos	84	44	57.5	10.61	Fort Klamath	.....	.....	.....	1.48	
Napa	80	37	54.7	8.87	Pennsylvania	.....	.....	.....	.....	
Ontario	84	44	58.9	9.80	Troy	60	18	35.6	.....	
Orland	87	47	62.4	4.52	Rhode Island	.....	.....	.....	.....	
Petaluma	78	39	56.4	7.36	Fort Adams	56	21	40.1	7.54	
Pleasanton	85	38	56.8	4.55	Texas	.....	.....	.....	.....	
Porterville	82	44	60.7	1.26	Camp Peña Colorado	.....	.....	.....	0.0	
Riverside	85	38	56.5	4.48	Corsican (2)	.....	.....	.....	2.14	
San Luis Obispo	79	44	58.0	6.99	Utah	Blue Creek	70	32	47.0	1.15
Santa Ana	81	50	61.3	4.65	.....	.....	.....	.....	.....	
Santa Clara	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Santa Monica	72	43	58.0	5.74	.....	.....	.....	.....	.....	
Shingle Springs	79	49	56.4	9.01	.....	.....	.....	.....	.....	
Sisson	76	30	44.4	15.97	.....	.....	.....	.....	.....	

## Reports received too late for publication in March.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	
Washington	o	o	o	Ins.	Washington	o	o	o	Ins.
Vashon	70	34	49.5	3.69	Glengow	o	o	o	o.57
West Virginia	64	17	38.4	1.51	Phillips	.....	.....	.....	0.93
Clarksburg d.	.....	.....	.....	.....	West Indies	.....	.....	.....	.....
Port au Prince	94	64	78.8	2.22	Port au Prince	94	64	78.8	2.22

Note.—The letters of the alphabet denote number of days missing in record.  
• Maximum and minimum from observed readings. † Readings from Signal Service instruments. ‡ Mean temperature from one observation taken at 10 a.m. § Mean from 7 a.m., 1 p.m., and 8 p.m. observations. || 4 inches snowfall reduced to approximate equivalent in water.

Correction: In miscellaneous table, vol. obs., March, 1889, for "Camp Peña Colorado, Texas," read "Camp Eagle Pass, Texas."

## Normal daily values of temperature and departures therefrom for September and October at New Ulm, Tex., for a period of seventeen years, 1872 to 1888, inclusive, by C. Runge, voluntary observer.

Day of month.	September.					October.				
	Normal temperature for 1888.	Departure from normal.	Mean maximum temperature.	Mean minimum temperature.	Normal temperature for 1888.	Departure from normal.	Mean maximum temperature.	Mean minimum temperature.	Normal temperature for 1888.	Departure from normal.
1	81	78	86	70	74	24	72	72	82	2
2	81	72	85	76	74	24	72	72	83	3
3	80	76	86	76	74	24	72	72	84	4
4										